

Title (en)  
ROTARY VALVE PLATE

Publication  
**EP 0302728 B1 19920603 (EN)**

Application  
**EP 88307211 A 19880804**

Priority  
US 8275487 A 19870806

Abstract (en)  
[origin: EP0302728A2] A rotary valve plate (27) of an internal gear machine (11), which rotary valve plate (27) is provided between a commutator (25) and a gear set comprising an inner gear (17) and an outer gear (29), has an imbalance thereacross due to high pressure fluid on the commutator side of the valve plate (27) being opposite low pressure fluid in variable displacement chambers (21) on the gear side of the valve plate. This imbalance is corrected by a recess (39) which extends around the periphery of the valve plate (27) and receives fluid from the gear side of the valve plate to urge the valve plate (27) toward the commutator (25). Preferably, the internal gear machine is of a kind having an orbiting outer rotor (19) orbiting in an annulus (20) with intermediate pressure fluid in the annulus (20). The recess (39) on the gear side of the valve plate (27) is disposed to receive intermediate pressure fluid from the annulus.

IPC 1-7  
**F04C 2/10**; **F04C 15/02**

IPC 8 full level  
**F04C 18/113** (2006.01); **F04C 2/10** (2006.01); **F04C 15/00** (2006.01)

CPC (source: EP US)  
**F04C 2/105** (2013.01 - EP US); **F04C 15/0042** (2013.01 - EP US); **Y10T 137/86638** (2015.04 - EP US)

Cited by  
EP1882855A3; EP0408011A1

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**EP 0302728 A2 19890208**; **EP 0302728 A3 19890906**; **EP 0302728 B1 19920603**; AT E76937 T1 19920615; CA 1312781 C 19930119; DE 3871643 D1 19920709; DE 3871643 T2 19921210; DK 439788 A 19890207; DK 439788 D0 19880805; JP S6477781 A 19890323; US 4813856 A 19890321

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